Shu-Wei (Frank) Hsu

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EDUCATION

Cornell Tech (Cornell University)   *Aug. 2023 – May 2025*
M.S. in Information Systems with a concentration in Connective Media   *New York City, NY*

National Taiwan University   *Sept. 2018 – Dec. 2022*
Bachelor of Science in Electrical Engineering | GPA: 3.73/4.3 (3.66/4.0)   *Taipei, Taiwan*
Course works: *Computer Programming, Machine Learning, Algorithm, Data Structures,*
Computer Networks, Computer Architecture, Web Programming, Operating System,

SKILLS

Programming Languages: Typescript, Javascript, Golang, Python, HTML/CSS, C#, C++, Solidity
Web Development: React, Nextjs, Node.js, GraphQL, TailwindCSS, Svelte, PostgreSQL, MongoDB, Apollo
Others: React Native, Datadog, AWS, Azure, Git, Turborepo, Nx, Docker, Figma, Storybook, Jest, Vitest, Cypress

EXPERIENCE

Circle Internet Financial, Inc   *May 2024 – Aug. 2024*
Software Engineer Intern   *New York, NY (Remote)*
- Enhanced monitoring by introducing **instrumentation** for end-to-end request tracing using **dd-trace** and **Datadog APM**, resulting in a **10x** improvement in debugging efficiency.
- Improved **observability** by identifying shared issues across services and unifying tracing context format
- Automated release note postings via **GitHub Action** and **Slack bot**, saving **15** minutes per deployment and enhancing stakeholder communication.
- Improved build efficiency by deprecating Babel and replacing it with Rust-based transpiler SWC

National Taiwan University, Office of Academic Affairs   *Aug. 2022 – Jan. 2023*
Frontend Engineer   *Taipei, Taiwan*
- Led a team of **9** in developing NTU's new course selection website, now used by **16,000+** students
- Developed a component library documented in **Storybook**, improving UI consistency and accelerating development workflows.
- Increased data-fetching efficiency by over **50%** in the **Next.js** application by integrating the stale-while-revalidate strategy

WOD.co   *Feb. 2022 – July 2022*
Software Engineer Intern   *Taipei, Taiwan*
- Launched a cross-platform workout TV app using **React Native**, adopted by **2** CrossFit gyms
- Enhanced gym owner control by developing a remote-control feature for the TV app, allowing operation via mobile devices using **Hasura** and **GraphQL**
- Enhanced data visibility by creating an interactive workout history dashboard using the **React-chart** library, empowering users to analyze their fitness progress with ease

PROJECTS

NTUCourse Neo 🎧 🔗 *(React, Next.js, PostgreSQL, Express.js)*

A redesigned course-planning web service for students at National Taiwan University
- Developed a course planning tool used by **5,000+** students, resulting in **1,500+** registered users
- Rewrote the entire codebase from **JavaScript** to **TypeScript**, enhancing maintainability and readability
- Applied Scrum Project Management for continuous improvement in a team of 3 students
- Collaborated with the Office of Academic Affairs at National Taiwan University to develop a new course information system

RecNet 🎧 🔗 *(React, Next.js, PostgreSQL, AWS, Nest.js, Nx)*

A human-driven recommendation system for academic readings
- Increased user engagement by automating weekly academic paper recommendations with **Nodemailer**
- Enhanced security by implementing **JWT** authentication and authorization, achieving robust **role-based access control**
- Employed Monoerepo **Nx** to streamline the development of backend (**Nest.js**) and frontend (**Next.js**) applications, optimizing build times through efficient caching and reducing duplication by code sharing

AWARDS AND GRANTS

[a] **H-W3B Hackathon** 3rd prize   2024
[b] **OSS Hack NYC** Best performance improvement award   2023